



May 15, 2003

Mr. Richard H. Karney
Program Manager,
Energy Star Program
Building Technologies Program
U. S. Department of Energy
1000 Independence Avenue SW
Washington, DC 20585

Subject: Comments on Energy Star Labeling Draft Criteria for Residential Water Heaters.

Dear Mr. Karney:

The American Gas Association (AGA) represents 191 local energy utility companies that deliver natural gas to more than 53 million homes, businesses and industries throughout the United States. Natural gas meets one-fourth of the United States' energy needs.

AGA's comments relate to the document, "ENERGY STAR® Labeling Potential for Water Heaters," U. S. Department of Energy, April 4, 2003 and presentation materials and discussion at the informal Energy Star water heater stakeholder meeting held on April 16, 2003.

The following are AGA's comments:

- If Energy Star Labeling criteria represent "*de facto* standards," proposed criteria should be subjected to public review consistent with Administrative Procedures Act. According to your statements at the April 16 meeting, "Energy Star has become a *de facto* standard" in products such as energy efficient windows. Case law confirms that criteria under voluntary programs that create *de facto* standards for products need to be subjected to normal rulemaking procedures called for under the Administrative Procedures Act. The fact that residential water heaters will have to meet new efficiency requirements on January 20, 2004 does not alter the potential for *de facto* standards posed by newer, more stringent efficiency levels under the Energy Star Labeling criteria. DOE has implemented a robust and transparent process for reviewing appliance efficiency standards under its Process Rule (61 FR 36974, July 15, 1996). DOE should follow this process for developing its Energy Star Labeling criteria. From the participation at the April 16 meeting, it appears that the current list of "stakeholders" being used by DOE is

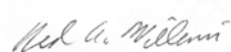
rather small. Broader review under formal administrative procedures would help develop a more robust representation and better stakeholder input.

- Implementation Options One through Four presented at the April 16 meeting are insufficient to address the range of technologies that the Energy Star Labeling criteria will and will not cover. For example, all four options include electric resistance storage water heaters in some form (i.e., "electric storage" or "advanced electrical SWH and HPWH"). Clearly, one option should be to exclude electric resistance based storage water heaters under the Energy Star Labeling program. Specific comments on electric storage water heaters are discussed below. DOE should consider water heater technologies for Energy Star Labeling independently and according to stable and defensible criteria, and let the chips fall where they may.
- Proposed minimum efficiencies for Energy Star Labeling of electric storage water heaters would offer insignificant energy savings and misleading information to consumers. As DOE heard at the April 16 meeting, an Energy Star Labeling energy factor (EF) of 0.93 over a 2004 minimum efficiency of 0.90 (both for a 50 gallon storage water heater), saves little energy and, as one participant stated, may "cheapen the image of Energy Star" by not providing energy and operating cost savings commensurate with other Energy Star Labeled products or even other residential water heater technologies. Energy savings estimates from the proposed EF for electric storage water heaters appear to bear this out. If an Energy Star Label is given to such a product, it is likely to encourage consumers to purchase the product as an energy efficiency measure regardless of other information such as the Federal Trade Commission Energy Guide Label. Such information is a more complete and meaningful information to consumers on energy and cost savings. Status as an Energy Star Labeled product would also be used as the basis for other consumer incentives for energy efficiency, even though significant energy savings would not be realized. Furthermore, if inadequacies exist for the water heater test procedure as applied to electric storage water heaters, as discussed at the April 16 meeting, DOE cannot be confident that its proposed EF for electric storage water heaters is significantly different from the new minimum efficiency levels, even on the basis of their EF rating. According to information from the National Institute of Standards and Technology (NIST) and the Final Rule on minimum efficiencies for residential water heaters (66 FR 4485-4486), research testing of electric storage water heaters showed that high efficiency storage water heaters systematically underachieved their ratings. Whether this performance is, in fact, an incorrect rating of water heaters or a deficiency of test procedure, DOE cannot justify Energy Star Labeling of such products as significantly more energy efficient.
- Criteria for considering technologies for Energy Star Labeling are arbitrary and, in some cases, appear unrelated to the objective of market transformation. In presentation materials provided in advance and at the April 16 meeting, DOE's consultant identifies minimum market penetrations, the presence of an existing

service infrastructure, number of listed models of the proposed minimum efficiency, and other factors as criteria for consideration of technologies. These criteria appear arbitrarily accepted for screening technologies. No sources of information have been provided justifying why these criteria are used. For example, presence of an existing service infrastructure was an important issue for screening technologies in the NAECA minimum efficiency standards process for residential water heaters because the standards state mandatory minimum efficiency and the need to comply with them by the effective date. It would not be logical to implement a mandatory minimum efficiency prior to the existence of a service infrastructure to support the product. In that case, the consumer may be left without adequate service support. Energy Star Labeled products are another matter. Manufacturers, in bringing a product to market with an Energy Star label, would be obliged to provide a service structure to support the product and could do so according to market timing and business planning demands. Other criteria, such as number of listed products, do not appear relevant to true market transformation. For example, a product from a short list may have a significant market share already. The number of listed products says nothing about current market share. Furthermore, if DOE wanted to incentivize product development in a particular technology, it may well consider technologies with no listed products currently. It, therefore, appears that the only criteria that DOE should use in considering technologies for Energy Star Listing should be: (1) whether the technology promise to save significant amounts of energy, (2) whether it is technologically feasible from a standpoint of current product evolution (i.e., again, not necessarily from the viewpoint of the NAECA standards process), and (3) whether it represent reasonable cost effectiveness from the standpoints of installed cost and simple payback to consumers. Thus far, such basic criteria do not appear to have been applied by DOE in development of its technology screening. Again, through more formalized administrative procedures, DOE could develop more meaningful analysis of these technologies.

This concludes the comments of AGA at this time. AGA expects that through broader stakeholder participation, DOE can develop a more sound approach for Energy Star Labeling of residential water heaters. AGA is prepared to participate in such a process.

Sincerely,



Ted A. Williams
Director, Codes, Standards
& Technical Support